Danner, Ward

From: Santos.Carmen@epamail.epa.gov

Sent: Wednesday, November 25, 2009 10:38 AM

To: Goloubow, Ron

Cc: Wilson, Patrick; Baylor, Katherine

Subject: PCBs: Aspire School Site in Oakland - MiniRAM and Short Term Perimeter Air Sampling for

Dust (PCB Aroclors in dust)

Importance: High

Greetings, Ron:

The message forwarded below contains some information concerning the miniRam air sampler. Is this the miniRam that you are referring to in Item 6 (Air Monitoring) of the November 18, 2009 LFR letter concerning USEPA's conditions of approval for the Aspire PCB Notification? I will call you the week of November 30, 2009.

Thank you.
Regards,
Carmen D. Santos, Project Manager
RCRA Corrective Action Office
Waste Management Division
USEPA Region 9
415.972.3360

-----Forwarded by Carmen Santos/R9/USEPA/US on 11/23/2009 12:41PM -----

To: Carmen Santos/R9/USEPA/US@EPA

From: Sent by NCBI

fax: 415.947.3533

Date: 11/23/2009 12:40PM Subject: PubMed Search Results

This message contains search results from the National Center for Biotechnology Information (NCBI) at the U.S. National Library of Medicine (NLM). Do not reply directly to this message

Sent on: Mon Nov 23 15:37:37 2009

1 selected item: 10462784

PubMed Results

Item 1 of 1

1. Am Ind Hyg Assoc J. 1999 Jul-Aug;60(4):502-11.

Evaluation and field calibration of the Miniram PDM-3 aerosol monitor for measuring respirable and total coal dust.

Middendorf PJ, Lehocky AH, Williams PL.

Georgia Tech Research Institute, Georgia Institute of Technology, Atlanta 30332, USA.

The MIE Miniram PDM-3 is a real-time aerosol dust monitor designed to measure dust based on Mie scattering. It has an optional in-line filter that, when attached to a constant flow air sampling pump, allows a gravimetric air sample to be collected from the same air stream that passes through the Miniram sensing chamber. This study compared real-time Miniram digital respirable and total dust readings with concentrations from an in-line 5 microns polyvinyl chloride filter connected to a constant flow pump and with results from traditional respirable and total dust samples. Area samples were collected at three coal-fired power generating facilities over a 2-month period. Traditional respirable dust concentrations ranged from 0.04 to 10.8 mg/m3. In the monitored range of concentrations the Miniram respirable concentrations and the in-line respirable dust concentrations were not significantly different (p > or = 0.05), nor were the Miniram in-line filter concentrations and the side-by-side respirable dust concentrations significantly different (p > or = 0.05). However, the Miniram respirable concentrations and the traditional respirable concentrations were significantly different (p = 0.02). The Statistical Analysis System (SAS) procedure CALIS, which meets the statistical requirements for developing calibration lines for two variables each measured with error, is used to develop field calibration curves for the comparisons between direct-reading instrument concentrations and concentrations from traditional National Institute for Occupational Safety and Health methods for total and respirable dust.

PMID: 10462784 [PubMed - indexed for MEDLINE]

Publication Types:

- Comparative Study
- Research Support, Non-U.S. Gov't

MeSH Terms:

- Aerosols/analysis
- Air Pollutants/analysis*
- Air Pollution, Indoor/prevention & control
- Calibration
- Coal*
- Dust/analysis*
- Environmental Monitoring/instrumentation*
- Equipment Design
- Humans
- Occupational Exposure/prevention & control

Substances:

- Aerosols
- Air Pollutants
- Coal
- Dust